

AMENDMENTS TO THE CLAIMS

- At time of the Action: Claims 1-54
- Amended Claims: Claims 1, 7, 13, 20, 37, 50, and 51
- Canceled Claims: Claims 17, 35, 36, and 53
- New Claim: Claim 55
- After this Response: Claims 1-16, 18-34, 37-52, and 54-55

The following listing of claims replaces all prior versions and listings of claims in the application.

1. (Currently Amended) A method comprising:

cyclically transmitting a set of data files to a plurality of data file receivers;
determining a number of data files accommodated by the set of data files;
determining a size of each data file;
determining a data transmission rate;
monitoring a worst case latency between successive transmissions of the data files
in the set of data files, wherein the worst case latency is calculated by a summation, for
other data files in the set of data files, of a relative ratio of the data file to another data file
rounded up to a next integer times a file size of the data file, the summation divided by
the data transmission rate;
modifying the set of data files based on information received from one or more of
the plurality of data file receivers; and
further modifying the set of data files if the worst case latency for the data files
exceeds a threshold value, wherein the threshold value is the time it takes for a data file
receiver request to reach a head end, the time it takes the head end to insert the data file

into a cyclical transmission of data files and the time it takes for the data file receiver to acquire the data file; and

cyclically transmitting the modified set of data files to the plurality of data file receivers.

2. (Original) A method as recited in claim 1, wherein modifying the set of data files comprises at least one of adding one or more data files to the set of data files and removing one or more data files from the set of data files.

3. (Original) A method as recited in claim 1, wherein the set of data files comprises two or more data files arranged in a predetermined order and wherein modifying the set of data files comprises at least one of adding one or more data files to the set of data files, removing one or more data files from the set of data files, and changing the order of the data files in the set of data files.

4. (Original) A method as recited in claim 1, wherein modifying the set of data files comprises changing a frequency of an existing data file in the set of data files.

5. (Original) A method as recited in claim 1, wherein the data files are grouped into subsets and wherein the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

6. (Original) A method as recited in claim 1, wherein each data file comprises data for rendering an image on a video display.

7. (Currently Amended) A method as recited in claim 1, wherein:

- each data file ~~files~~ comprises data for rendering an image on a video display;
- the data files are grouped into subsets; and
- the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

8. (Original) A method as recited in claim 1, wherein:

- each data file comprises data for rendering an image on a video display;
- the data files are hierarchically associated; and
- the information received from the one or more of the plurality of data file receivers identifies a position in the hierarchy.

9. (Original) A method as recited in claim 1, wherein:

- each data file is associated with a computer executable program;
- the data files are grouped into subsets; and
- the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

10. (Original) A method as recited in claim 1, wherein:

- each data file comprises data for rendering an image on a video display;

each data file includes a user selectable link to another data file in the set of data files; and

the information received from the one or more of the plurality of data file receivers is associated with user selection of one or more of the links.

11. (Original) A method as recited in claim 1, wherein each data file comprises information associated with a web page.

12. (Original) A method as recited in claim 1, wherein each data file comprises a web page.

13. (Currently Amended) A method as recited in claim 1, wherein:

each data file comprises a web page; and

data files are grouped into subsets according to relative positions, associations, or linkages in a web site that is represented by the data files;

each web page includes one or more hypertext links; and

the information received from the one or more of the plurality of data file receivers is associated with user selection of one or more of the hypertext links; and includes information related to one or more subsets of data files that is previously sent to the data file receivers or a data file that is desired by the data file receivers.

14. (Original) A method as recited in claim 1, wherein:

each data file comprises a web page;

each web page includes one or more hypertext links;
the web pages are grouped into web page regions; and
the information received from the one or more of the plurality of data file receivers identifies one or more a web page regions.

15. (Original) A method as recited in claim 1, wherein:

each data file comprises a web page;
each web page includes one or more hypertext links;
the web pages are grouped into web page regions; and
the information received from the one or more of the plurality of data file receivers identifies a web page region including a web page identified by a user selected hypertext link.

16. (Original) A method as recited in claim 1, further comprising:

determining a number of data files accommodated by the set of data files;
identifying a maximum latency value between successive transmissions of a particular data file in the set of data files;
identifying a request frequency associated with various data files; and
inserting data files into the set of data files based on the identified request frequency, the maximum latency value permitted between successive transmissions of a particular data file in the set of data files, and the information received from the one or more of the plurality of data file receivers.

17. (Canceled)

18. (Original) A method as recited in claim 16, further comprising positioning the inserted data files such that a worst case latency between successive transmissions of a particular data file is less than the maximum latency value.

19. (Original) One or more computer-readable media containing a computer program that is executable by a processor to perform the method recited in claim 1.

20. (Currently Amended) A system comprising:

a data carousel generator cyclically transmitting a set of data files to one or more data file receivers; and

a carousel configuration module that modifies the set of data files;

based on information received from the one or more data file receivers
through a back channel;

based on a file transmission latency information, wherein the file transmission latency is an amount of time between receiving a request for a particular file and providing a requested file from a data carousel; and

such that a worst case latency between successive transmissions of a particular data file is less than a maximum latency value, wherein the maximum latency value is a maximum amount of time permitted between receiving a request for a particular file and providing the requested file from the data carousel.

21. (Original) A system as recited in claim 20, wherein modifying the data files comprises adding one or more data files to the set of data files.

22. (Original) A system as recited in claim 20, wherein modifying the data files comprises removing one or more data files from the set of data files.

23. (Original) A system as recited in claim 20, wherein the set of data files are arranged in a predetermined order and wherein modifying the data files comprises at least one of adding one or more data files to the set of data files, removing one or more data files from the set of data files, and changing the order of the data files in the set of data files.

24. (Original) A system as recited in claim 20, wherein the data files are grouped into subsets and wherein the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

25. (Original) A system as recited in claim 20, wherein each data file comprises data for rendering and image on a video display.

26. (Original) A system as recited in claim 20, wherein:

each data file comprises data for rendering an image on a video display;

the data files are grouped into subsets; and

the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

27. (Original) A system as recited in claim 20, wherein:

each data file comprises data for rendering an image on a video display;
the data files are hierarchically associated; and
the information received from the one or more of the plurality of data file receivers identifies a position in the hierarchy.

28. (Original) A system as recited in claim 20, wherein:

each data file is associated with a computer executable program;
the data files are grouped into subsets; and
the information received from the one or more of the plurality of data file receivers identifies one of the subsets.

29. (Original) A system as recited in claim 20, wherein:

each data file comprises data for rendering an image on a video display;
each data file includes a user selectable link to another data file in the set of data files; and
the information received from the one or more of the plurality of data file receivers is associated with selection by a user of one or more of the links.

30. (Original) A system as recited in claim 20, wherein each data file comprises information associated with a web page.

31. (Original) A system as recited in claim 20, wherein each data file comprises a web page.

32. (Original) A system as recited in claim 20, wherein:

each data file comprises a web page;

each web page includes one or more hypertext links; and

the information received from the one or more of the plurality of data file receivers is associated with user selection of one or more hypertext links.

33. (Original) A system as recited in claim 20, wherein:

each data file comprises a web page;

each web page includes one or more hypertext links;

the web pages are grouped into web page regions; and

the information received from the one or more of the plurality of data file receivers identifies one or more of the web page regions.

34. (Original) A system as recited in claim 20, wherein:

each data file comprises a web page;

each web page includes one or more hypertext links;

the web pages are grouped into web page regions; and

the information received from the one or more of the plurality of data file receivers identifies a web page region including a web page identified by a user selected hypertext link.

35. (Canceled)

36. (Canceled)

37. (Currently Amended) One or more computer-readable media having stored thereon a computer program that, when executed by one or more processors, causes the one or more processors to:

determine an arrangement of data files in a set of cyclically broadcast data files based on information received from one or more data file receivers of the set of cyclically broadcast data files, wherein the information identifies a data file that is desired by the data file receiver.

38. (Original) One or more computer-readable media as recited in claim 37, wherein the data files in the set of cyclically broadcast data files are arranged in a predetermined order and wherein modifying the data files comprises at least one of adding one or more data files to the set of cyclically broadcast data files, removing one or more data files from the set of cyclically broadcast data files, and changing the order of the data files in the set of cyclically broadcast data files.

39. (Original) One or more computer-readable media as recited in claim 37, wherein the data files in the set of cyclically broadcast data files are grouped into subsets and wherein the information received from the one or more receivers of the set of cyclically broadcast data files identifies one of the subsets.

40. (Original) One or more computer-readable media as recited in claim 37, wherein each data file comprises data for rendering an image on a video display.

41. (Original) One or more computer-readable media as recited in claim 37, wherein:

- each data file comprises data for rendering an image on a video display;
- the data files are grouped into subsets; and
- the information received from the one or more receivers of the set of cyclically broadcast data files identifies one of the subsets.

42. (Original) One or more computer-readable media as recited in claim 37, wherein:

- each data file comprises data for rendering an image on a video display;
- the data files are hierarchically associated; and
- the information received from the one or more receivers of the set of cyclically broadcast data files identifies a position in the hierarchy.

43. (Original) One or more computer-readable media as recited in claim 37, wherein:

- each data file is associated with a computer executable program;
- the data files are grouped into subsets; and

the information received from the one or more receivers of the set of cyclically broadcast data files identifies one of the subsets.

44. (Original) One or more computer-readable media as recited in claim 37, wherein:

each data file comprises data for rendering an image on a video display;
each data file includes a user selectable link to another data file in the set of data files; and

the information received from the one or more receivers of the set of cyclically broadcast data files is associated with selection of one or more of the data file receiver selectable links.

45. (Original) One or more computer-readable media as recited in claim 37, wherein each data file comprises information associated with a web page.

46. (Original) One or more computer-readable media as in claim 37, wherein each data file comprises a web page.

47. (Original) One or more computer-readable media as recited in claim 37, wherein:

each data file comprises a web page;
each web page includes one or more hypertext links; and
the information received from the one or more receivers of the set of cyclically broadcast data files is associated with a user selection of one or more hypertext links.

48. (Original) One or more computer-readable media as recited in claim 37, wherein:

- each data file comprises a web page;
- each web page includes one or more hypertext links;
- the web pages are grouped into web page regions; and
- the information received from the one or more receivers of the set of cyclically broadcast data files identifies one or more a web page regions.

49. (Original) One or more computer-readable media as recited in claim 37, wherein:

- each data file comprises a web page;
- each web page includes one or more hypertext links;
- the web pages are grouped into web page regions; and
- the information received from the one or more receivers of the set of cyclically broadcast data files identifies a web page region including a web page identified by a user selected hypertext link.

50. (Currently Amended) One or more computer-readable media as recited in claim 37, wherein the determination of the arrangement of data files the set of cyclically broadcast data files is made such that a worst case latency between successive transmissions of a particular data file is less than a maximum latency value,
wherein a worst case latency is calculated by a summation, for the data files in the set of data files, of a relative ratio of the data file to another data file rounded up to a next integer times a file size of the data file, the summation divided by a data transmission rate, and

wherein the maximum latency value is a maximum amount of time permitted between receiving a request for a particular file and providing the requested file from the data carousel.

51. (Currently Amended) A system comprising:

a data carousel generator cyclically transmitting a set of data files to one or more data file receivers; and

carousel modification means for modifying the set of data files based on information received from the one or more data file receivers, wherein the carousel modification means further modifies the order of the set of data files broadcast from the data carousel generator based on file transmission latency information.

52. (Original) A system as recited in claim 51, wherein the carousel modification means comprises a carousel configuration module in operable communication with the data carousel generator and the one or more data file receivers.

53. (Canceled)

54. (Original) A system as recited in claim 51, wherein the carousel modification means modifies the order of the set of data files broadcast from the data carousel generator such that a worst case latency between successive transmissions of a particular data file is less than a maximum latency value.

55. (New) The system as recited in claim 20, wherein the carousel configuration module monitors and aggregates requests for the data files from the data file receivers, maintains a record of the data file requests received over a pre-defined time window, inserts or removes the data files based on requests accumulated over the time window, and calculates a frequency of a new data file from the relative number of requests for one data file versus another.